Graphical abstracts

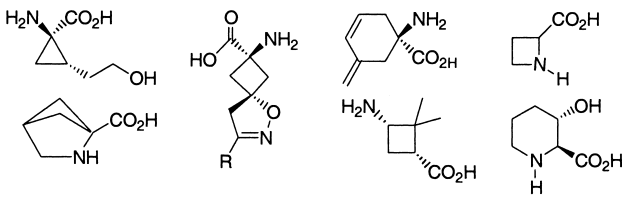
Cyclic amino acid derivatives

Tetrahedron 58 (2002) 8629

Kyung-Ho Park[a] and Mark J. Kurth[b,*]

[a]*DuPont, Central Research and Development, Experimental Station, P.O. Box 80328, Wilmington, DE 19880-0328, USA*
[b]*Department of Chemistry, University of California, Davis, CA 95616, USA*

This report provides an overview of the preparation of conformationally constrained cyclic amino acids and their derivatives.

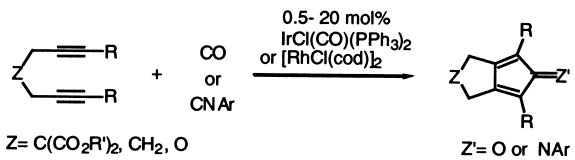


Ir and Rh complex-catalyzed intramolecular alkyne–alkyne couplings with carbon monoxide and isocyanides

Tetrahedron 58 (2002) 8661

Takanori Shibata,* Koji Yamashita, Emi Katayama and Kentaro Takagi

Department of Chemistry, Faculty of Science, Okayama University, Tsushima, Okayama 700-8530, Japan

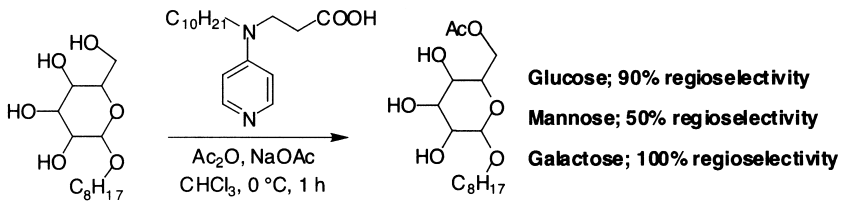


Functionalized DMAP catalysts for regioselective acetylation of carbohydrates

Tetrahedron 58 (2002) 8669

Takuya Kurahashi, Tadashi Mizutani* and Jun-ichi Yoshida*

Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan

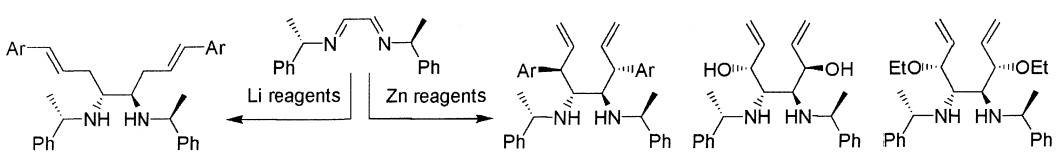


Study of the regioselectivity and diastereoselectivity in the addition of 3-substituted-2-propenylmetal reagents to *N*,*N*′-di[1(*S*)-phenylethyl]ethanediimine

Tetrahedron 58 (2002) 8679

Claudio Fiorelli, Lucia Maini, Gianluca Martelli, Diego Savoia* and Carla Zazzetta

Dipartimento di Chimica 'G. Ciamician', Università di Bologna, via Selmi 2, 40126 Bologna, Italy

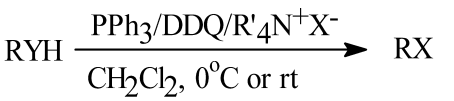


Tetrahedron 58 (2002) 8689

Triphenylphosphine/2,3-dichloro-5,6-dicyanobenzoquinone as a new, selective and neutral system for the facile conversion of alcohols, thiols and selenols to alkyl halides in the presence of halide ions

N. Iranpoor,* H. Firouzabadi,* Gh. Aghapour and A. R. Vaez zadeh

Department of Chemistry, College of Sciences, Shiraz University, Shiraz 71454, Iran



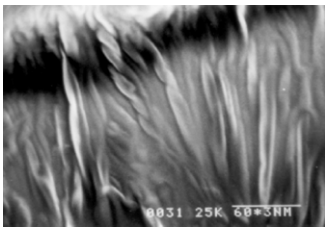
Y= O, S, Se R'= H, n-Butyl, n-Hexyl
X= Cl, Br, I

Tetrahedron 58 (2002) 8695

Fibril-forming model synthetic peptides containing 3-aminophenylacetic acid

Samir Kumar Maji, Debasish Haldar, Arijit Banerjee and Arindam Banerjee*

Department of Biological Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Kolkata 700 032, India

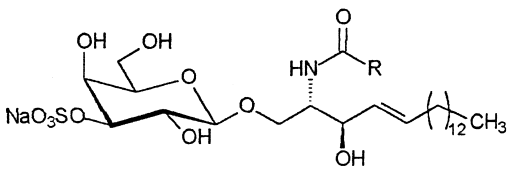


Tetrahedron 58 (2002) 8703

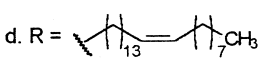
CD1a-binding glycosphingolipids stimulating human autoreactive T-cells: synthesis of a family of sulfatides differing in the acyl chain moiety

Federica Compostella,[a] Laura Franchini,[a] Gennaro De Libero,[b] Giovanni Palmisano,[c] Fiamma Ronchetti[a] and Luigi Panza[d,*]

[a]*Dipartimento di Chimica e Biochimica Medica, Università di Milano, Via Saldini 50, 20133 Milano, Italy*
[b]*Experimental Immunology, University Hospital, 4031 Basel, Switzerland*
[c]*Dipartimento di Scienze Chimiche, Fisiche e Matematiche, Università dell' Insubria, Via Valleggio 11, 22100 Como, Italy*
[d]*Dipartimento di Scienze Chimiche, Alimentari, Farmaceutiche e Farmacologiche, Università del Piemonte Orientale, Viale Ferrucci 33, 28100 Novara, Italy*



a. R = $C_{15}H_{31}$ b. R = $C_{17}H_{35}$ c. R = $C_{21}H_{43}$



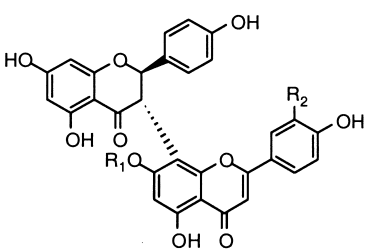
Tetrahedron 58 (2002) 8709

Absolute configuration, conformation, and chiral properties of flavanone-(3→8″)-flavone biflavonoids from *Rheedia acuminata*

Xing-Cong Li,[a,*] Alpana S. Joshi,[a] Bo Tan,[b] Hala N. ElSohly,[a] Larry A. Walker,[a,c] Jordan K. Zjawiony[b] and Daneel Ferreira[a,*]

[a]*National Center for Natural Products Research, Research Institute of Pharmaceutical Sciences, School of Pharmacy, The University of Mississippi, MS 38677, USA*
[b]*Department of Pharmacognosy, School of Pharmacy, The University of Mississippi, MS 38677,USA*
[c]*Department of Pharmacology, School of Pharmacy, The University of Mississippi, MS 38677, USA*

Variable temperature NMR, AM1 calculations, and circular dichroism permitted the first unequivocal definition of the two low-energy conformers and absolute configurations of a series of flavanone-(3→8″)-flavone biflavonoids.



1 R_1 = H, R_2 = OH
2 R_1 = SO_3H, R_2 = OH
3 R_1 = SO_3H, R_2 = H

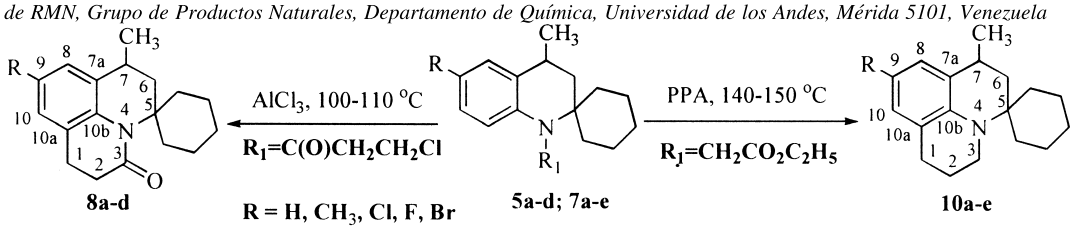
Studies directed to the synthesis of new C-5 spiroannulated julolidines

Tetrahedron 58 (2002) 8719

Alirio Palma,[a] Javier Silva Agredo,[a] Claudia Carrillo,[a] Vladimir Kouznetsov,[a,*] Elena Stashenko,[a] Alí Bahsas[b] and Juan Amaro-Luis[b]

[a]*Laboratory of Fine Organic Synthesis, Research Center for Biomolecules, School of Chemistry, Industrial University of Santander, A.A. 678, Bucaramanga, Colombia*

[b]*Laboratorio de RMN, Grupo de Productos Naturales, Departamento de Química, Universidad de los Andes, Mérida 5101, Venezuela*



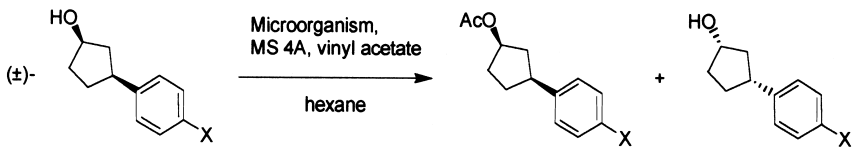
Efficient and practical synthesis of both enantiomers of 3-phenylcyclopentanol derivatives

Tetrahedron 58 (2002) 8729

Yoshiyuki Okumura,[a] Akemi Ando,[a] Rodney William Stevens[a] and Makoto Shimizu[b,*]

[a]*Department of Medicinal Chemistry, Pfizer Global Research and Development, Nagoya, 5-2 Taketoyo, Aichi 470-2393, Japan*

[b]*Department of Chemistry for Materials, Mie University, Tsu, Mie 514-8507, Japan*



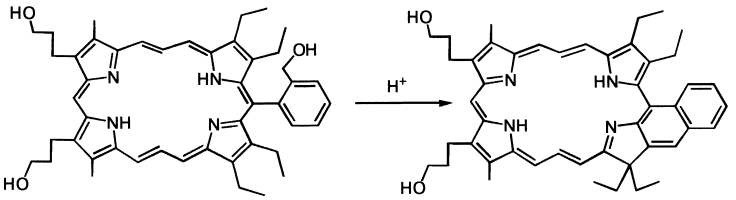
Synthesis of a bis-vinylogous chlorin possessing a fused naphthalene ring

Tetrahedron 58 (2002) 8737

Dipanjan Sengupta and Byron Robinson*

Miravant Pharmaceuticals, Inc., 336 Bollay Drive, Santa Barbara, CA 93117, USA

A novel expanded chlorin with a fused naphthalene ring was synthesized from a (2′-hydroxymethyl)phenyl bis-vinylogous porphyrin via an acid catalyzed cyclization.



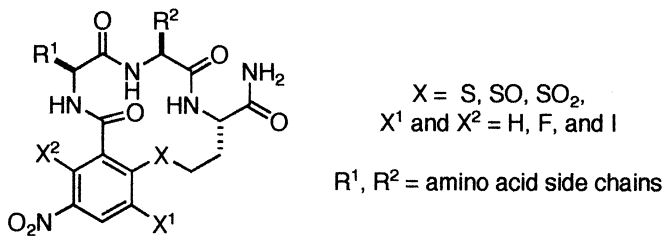
Fluorinated and iodinated templates for syntheses of β-turn peptidomimetics

Tetrahedron 58 (2002) 8743

Luyong Jiang and Kevin Burgess*

Department of Chemistry, Texas A&M University, P.O. Box 30012, College Station, TX 77842-3012, USA

Solid phase syntheses of the neurotrophin β-turn mimics are reported, along with conformational analyses, and assignment of the *S*-atom configuration of sulfur for the sulfoxides.

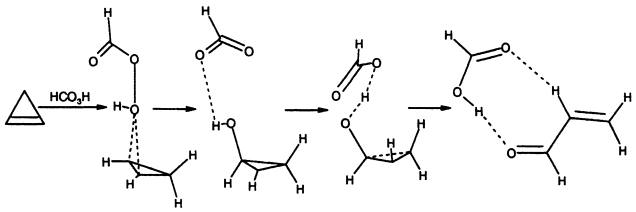


Is 2-oxabicyclobutane formed during the reaction of peroxyacids with cyclopropene? A high-level ab initio study

Tetrahedron 58 (2002) 8751

Sergiy Okovytyy,[a,b] Leonid Gorb[a] and Jerzy Leszczynski[a,*]

[a]*Computational Center for Molecular Structure and Interactions, Department of Chemistry, Jackson State University, Jackson, MS 39217, USA*
[b]*Department of Organic Chemistry, Dnepropetrovsk National University, Dnepropetrovsk 39625, Ukraine*



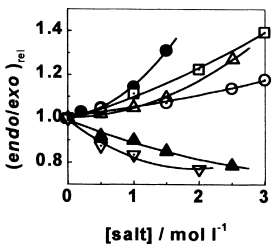
Salt effect on the *endo*/*exo* ratio of the reaction of cyclopentadiene with methyl methacrylate

Tetrahedron 58 (2002) 8759

Suvarna S. Deshpande,[a] Usha D. Phalgune[b] and Anil Kumar[a,*]

[a]*Physical Chemistry Division, National Chemical Laboratory, Pune 411 008, India*
[b]*OCS Division, National Chemical Laboratory, Pune 411 008, India*

The salt effect on the stereoselectivities of the reaction of cyclopentadiene with methyl methacrylate has been examined in detail.

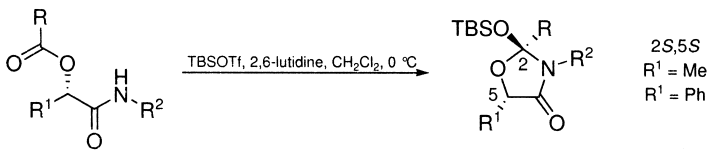


Stereoselective formation of optically active 2-oxy-1,3-oxazolidin-4-ones from chiral *O*-acylmandelamides or lactamides

Tetrahedron 58 (2002) 8763

Akio Kamimura,[a,*] Yoji Omata,[a] Akikazu Kakehi[b] and Masashi Shirai[c]

[a]*Department of Applied Chemistry, Faculty of Engineering, Yamaguchi University, Ube 755-8611, Japan*
[b]*Department of Chemistry and Material Engineering, Faculty of Engineering, Shinshu University, Nagano 380-8553, Japan*
[c]*Ube Laboratory, Ube Industries Ltd., Ube 755-8633, Japan*

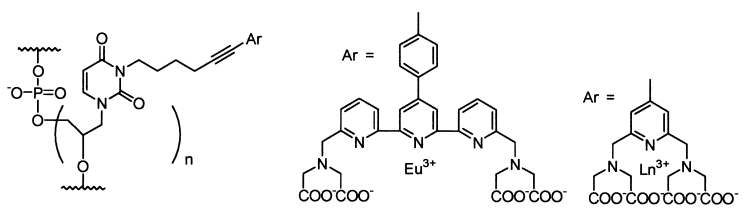


Oligonucleotide conjugates based on acyclonucleosides and their use in DNA hybridization assays

Tetrahedron 58 (2002) 8771

Harri Hakala, Pia Ollikka, Jenni Degerholm and Jari Hovinen*

PerkinElmer Life Sciences, Turku Site (Wallac Oy), P.O. Box 10, FIN-20101 Turku, Finland

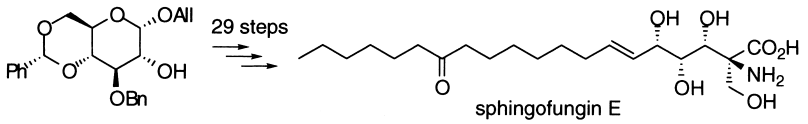


Total synthesis of sphingofungin E from D-glucose derivative

Tetrahedron 58 (2002) 8779

Tsuyoshi Nakamura and Masao Shiozaki*

Exploratory Chemistry Research Laboratories, Sankyo Co., Ltd., 2-58 Hiromachi 1-Chome, Shinagawa-ku, Tokyo 140-8710, Japan

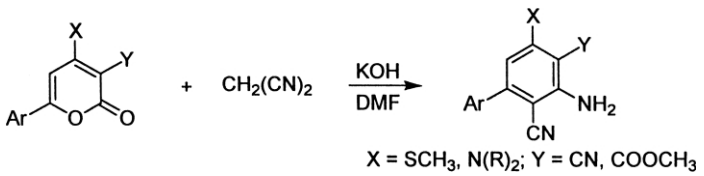


A diversity oriented synthesis of highly functionalized unsymmetrical biaryls through carbanion induced ring transformation of 2*H*-pyran-2-ones

Tetrahedron 58 (2002) 8793

Nidhi Agarwal, Abhishek S. Saxena, Farhanullah, Atul Goel and Vishnu J. Ram*

Medicinal Chemistry Division, Central Drug Research Institute, Lucknow 226001, India



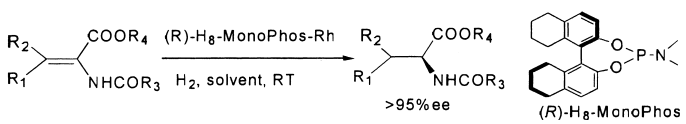
H_8-MonoPhos and its application in catalytic enantioselective hydrogenation of α-dehydroamino acids

Tetrahedron 58 (2002) 8799

Qingle Zeng,[a] Hui Liu,[a] Aiqiao Mi,[a] Yaozhong Jiang,[a,*] Xingshu Li,[b] Michael C. K. Choi[b] and Albert S. C. Chan[b]

[a]*Union Laboratory of Asymmetric Synthesis, Chengdu Institute of Organic Chemistry, Chinese Academy of Sciences, Chengdu 610041, People's Republic of China*

[b]*Open Laboratory of Chirotechnology and Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, People's Republic of China*

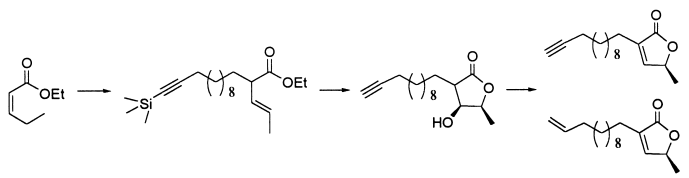


Sharpless AD strategy towards the γ-methyl butenolide unit of acetogenins: enantioselective synthesis of butenolide I and II with mosquito larvicidal activity

Tetrahedron 58 (2002) 8805

Yan-Tao He, Hui-Na Yang and Zhu-Jun Yao*

State Key Laboratory of Bioorganic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, People's Republic of China

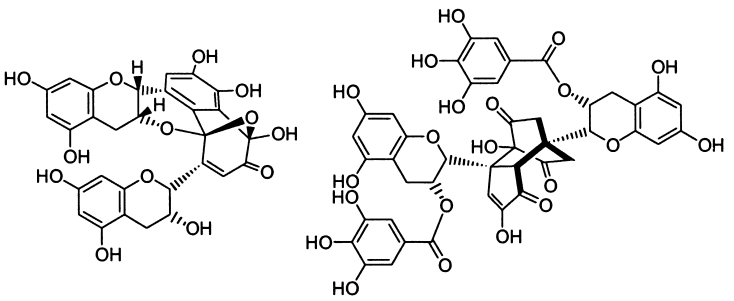


Structures of two new oxidation products of green tea polyphenols generated by model tea fermentation

Tetrahedron 58 (2002) 8851

Takashi Tanaka, Chie Mine and Isao Kouno*

Department of Molecular Medicinal Sciences, Graduate School of Biomedical Sciences, Nagasaki University, 1-14 Bunkyo Machi, Nagasaki 852-8521, Japan

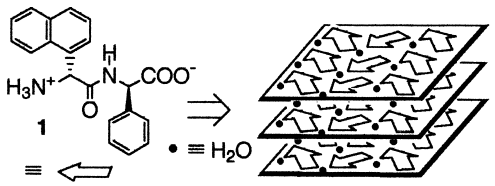


An important role of water in construction and destruction of the sheet structure in dipeptide aggregate

Tetrahedron 58 (2002) 8857

Motohiro Akazome,[a] Toshiaki Takahashi,[b] Ryo-ichi Sonobe[a] and Katsuyuki Ogura[a,*]

[a]*Department of Materials Technology, Faculty of Engineering, Chiba University, 1-33 Yayoicho, Inageku, Chiba 263-8522, Japan*
[b]*Graduate School of Science and Technology, Chiba University, 1-33 Yayoicho, Inageku, Chiba 263-8522, Japan*

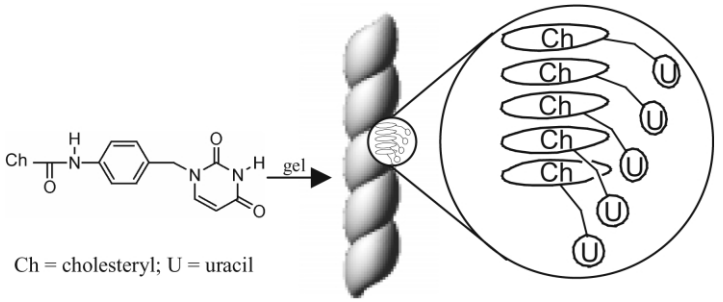


Gel formation properties of a uracil-appended cholesterol gelator and cooperative effects of the complementary nucleobases

Tetrahedron 58 (2002) 8863

Erwin Snip,[a] Kazuya Koumoto[a] and Seiji Shinkai[a,b,*]

[a]*Chemotransfiguration Project, Japan Science and Technology Corporation (JST), Kurume Research Center Bldg., 2432 Aikawa, Kurume, Fukuoka 839-0861, Japan*
[b]*Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University, Fukuoka 812-8581, Japan*



Synthesis of a strained, air-sensitive, polycyclic aromatic hydrocarbon by means of a new 1,4-benzadiyne equivalent

Tetrahedron 58 (2002) 8875

Ingeborg I. Schuster, Liliana Craciun, Douglas M. Ho and Robert A. Pascal, Jr.*

Department of Chemistry, Princeton University, Princeton, NJ 08544, USA